

Notice of Allowability	Application No.	Applicant(s)	
	09/619,775	KRASNER, NORMAN F.	
	Examiner	Art Unit	
	Charles Chow	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 1/11/2007.
2. ☒ The allowed claim(s) is/are 44-50.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. <input type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date <u>3/22/2004</u> 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>3/21/2007</u>. 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____. |
|---|---|

Detailed Action

1. This office action is for amendment received on 1/11/2007.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment has been given from attorney Andrea Mays in a telephone interview on March 21, 2007.

Attorney has authorized examiner to amend claim 44 as follows:

For claim 44,

In line 11, removing the word "and".

In line 13, replacing "." with ----; and----.

In last line 14, adding a sentence as in below:

----acquiring a satellite positioning system signal by a mobile communication device using the said Doppler search window----.

Allowable Subject Matter

3. The following is an examiner's statement of reasons for allowance:

Claims 44-50 are allowable over the prior art of record. The prior arts fail to teach the allowable features, singly, particularly, or in combination, together with an effective filing date of 7/20/1999.

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The prior arts fail to teach the features for the method of determining a Doppler search window for acquiring a satellite position system signal by a mobile communication device,

the method comprising:

receiving a cellular communication signal;

determining a change in received cellular communication signal resulting from motion of the mobile communication device;

converting the change in the received cellular communication signal to approximate motion information;

determining the Doppler search window based on the approximate motion information;

and

acquiring a satellite positioning system signal by a mobile communication device using said Doppler search window [in independent claim 44].

The dependent claims 45-50 are also allowable due to their dependency upon the allowable independent claims above and the having additional claimed features.

The closest prior art, **Barnard [US 5,119,101]**, teaches the satellite frequency offset derived Doppler frequency offset from known speed of the user vehicle [abstract, col. 5, lines 29-68].

Other prior art **Hakalin et al. [US 6,577,603 B1]** teaches the determination of the speed of a receiving terminal from the instantaneous signal strength with a given time [abstract, col. 3, lines 44-52], but fails to teach the Doppler search window above.

Other prior arts in below has been considered, but they fail to teach the above allowable features.

Ando [US 5,036,329] teaches the frequency search range within the Doppler frequency shift of +/-600 Hz predicted from the known speed of 60 mile/second [abstract, col. 5, lines

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1-20; col. 4, lines 64-68], but fails to teach the Doppler frequency shift is derived from the change in received signal due to motion.

Kanai [US 5,239,667] teaches the speed is determined by measuring of the crossing rate of the received signal strength [col. 3, line 2 to col. 4, line 30].

Gilhousen [US 5,859,612] teaches the monitoring of the received power control commands, in order to determine the position information, & to rotate the antenna beam [abstract, col. 1, lines 8-15].

Schuchman et al. [US 6,111,538] teaches the determination of the position of a mobile telephone, by utilizing the transmitted beacon signal from the base cell site station [col. 8, line 64 to col. 9, line 17, table 4, abstract].

Abraham et al. [US 5,510,797] teaches the timing signal sequence 15A-15D for synchronizing the users in CDMA/TDAM system [abstract, col. 6, lines 28-47].

Pon [US 5,771,456] teaches the suppression of the multi-path interference by utilizing mobile user's speed velocity to determine the location from the derived pseudo-range [abstract, Fig. 1-2, col. 2, lines 8-45].

Other prior arts are also considered. They are: **Wysocki et al. [US 5,381,338]**, **MacDoran et al. [US 4,797,677]**, **Bonta [US 4,696,027]**, **Gordon et al. [US 5,168,574]**, **Takenaka et al. [US 5,585,805]**, **Cisneros et al. [US 5,774,829]**.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


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Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles C. Chow whose telephone number is (571) 272-7889. The examiner can normally be reached on 8:00am-5:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Charles Chow *cc*

March 19, 2007.


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